



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/756,790

01/13/2004

Thomas Arnold Anschutz

9400-62

2954

39072

7590

05/28/2008

MYERS BIGEL SIBLEY & SAJOVEC, P.A.

P.O. BOX 37428

RALEIGH, NC 27627

EXAMINER

ALAM, UZMA

ART UNIT

PAPER NUMBER

2157

MAIL DATE

DELIVERY MODE

05/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/756,790	Applicant(s) ANSCHUTZ ET AL.	
	Examiner UZMA ALAM	Art Unit 2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to the request for a pre appeal conference submitted February 26, 2008. The prosecution has been reopened for this case. Claims 1-55 are pending. Claims 1-55 represent a method, system and computer program product for modifying at least one of bandwidth and QoS for a user session in a network.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-55 rejected under 35 U.S.C. 103(a) as being unpatentable over Chellis et al. US Patent No. 6,901,446 (herein referred to as "Chellis") in view DeLima et al. Chellis teaches the invention as claimed including a system and method for allocating resources. DeLima teaches the invention as claimed including quality of service improvements for network transactions (see abstract).

As per claim 1, Chellis teaches a method of modifying at least one of at least one of bandwidth and Quality of Service (QoS) for a user session in a network that comprises a Regional/Access Network (RAN) that facilitates differentiated end-to-end data transport between a Network Service Provider (NSP) and an Application Service Provider (ASP) and a Customer Premises Network (CPN) that includes Customer Premises Equipment (CPE), comprising:

receiving a request at at least one of at least one of the NSP and the ASP [resource allocator 30, resource request manager 40] to change at least one of at least one of bandwidth and QoS [resource 25] associated with the user's [consumer 20; component] session (request for more resources; column 3, line 54-57; column 4, lines 28-40; column 8, lines 36-41; column 9, lines 1-15); and

using Application Programming Interface (API) calls [abstract] at at least one of at least one of the NSP and the ASP to communicate with the RAN to modify the at least one of at least one of bandwidth and QoS associated with the user's session (allocating resources; column 4, lines 28-40; column 8, lines 18-26; column 8, lines 51-60; column 21, lines 16-45).

Chellis does not specifically teach using API calls to modify the at least one of at least one of bandwidth and QoS associated with the user's session. DeLima teaches API calls to modify the at least one of at least one of bandwidth and QoS associated with the user's session (see column 10, lines 28-50).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the API of Chellis with the API calls of DeLima. A person of ordinary skill in the art would have been motivated to do this to allow communication between different types of applications..

As per claim 2, Chellis and DeLima teach the method of Claim 1, wherein receiving the request comprises: initiating the request at at least one of at least one of the NSP and the ASP to change at least one of the at least one of bandwidth and QoS associated with the user's session

Art Unit: 2157

(the resources are allocated based on network monitoring; column 4, lines 28-40; column 10, lines 43-50; column 14, lines 29-64)

As per claim 3, Chellis and DeLima teach the method of Claim 1, wherein receiving the request comprises: receiving the request at at least one of at least one of the NSP and the ASP from a user to change the at least one of at least one of bandwidth and QoS associated with the user's session (sending a request from a user; column 4, lines 28-40; column 10, lines 43-50; column 14, lines 29-64).

As per claim 4, Chellis and DeLima teach the method of Claim 3, wherein the QoS associated with the user's session is scheduling resources (resources determined based on timings; column 4, lines 28-40; column 11, lines 15-57).

As per claim 5, Chellis and DeLima teach the method of Claim 4, wherein using the API comprises: sending a query from at least one of the NSP and the ASP to the RAN to obtain a at least one of bandwidth range and QoS capabilities from the RAN (determining resource availability; column 3, lines 45-58; column 4, lines 40-58; column 12, lines 39-57).

As per claim 6, Chellis and DeLima teach the method of Claim 5, further comprising: presenting to the user via the ASP and at least one of the NSP at least one at least one of bandwidth/QoS option within the at least one of bandwidth range and QoS capabilities received from the RAN (column 4, lines 40-58; column 15, lines 59-67; column 16, lines 1-26).

As per claim 7, Chellis and DeLima teach the method of Claim 6, further comprising:
obtaining a user selection of one of the at least one at least one of bandwidth/QoS option
at at least one of the NSP and the ASP (determining the user's choice for resources; column 4,
lines 40-58); and

updating the RAN with information to provide the selected at least one of bandwidth/QoS
option for the user's session (column 11, lines 15-57; column 15, lines 56-67; column 16, lines 1-
26; column 19, lines 8-47).

As per claim 8, Chellis and DeLima teach the method of Claim 7, further comprising:
updating the CPE with the information to provide the selected at least one of bandwidth/QoS
option for the user's session (column 11, lines 15-56; column 13, lines 45-67).

As per claim 9, Chellis and DeLima teach the method of Claim 8, wherein updating the
CPE with information comprises: sending an update session at least one of bandwidth info
message and a QoS-related message from the RAN to the CPE that contains a request for
changing the at least one of bandwidth/QoS associated with the user's session to the selected at
least one of bandwidth option in the CPE (column 11, lines 15-56; column 13, lines 45-67).

As per claim 10, Chellis and DeLima teach the method of Claim 9, wherein updating the
RAN with information further comprises: updating a rate limit and QoS associated with a

communication queue in the RAN that is used to process traffic associated with the user's session (column 4, lines 40-58; column 10, lines 56-67; column 16, lines 1-26).

As per claim 11, Chellis and DeLima teach the method of Claim 7, wherein updating the RAN with information comprises: sending a change session at least one of bandwidth request message from at least one of the NSP and the ASP to the RAN that contains a request for changing the at least one of bandwidth associated with the user's access session to the selected at least one of bandwidth option in the RAN (column 11, lines 15-56; column 13, lines 45-67).

As per claim 12, Chellis and DeLima teach the method of Claim 11, further comprising: sending a change session at least one of bandwidth response message from the RAN to at least one of the NSP and the ASP that contains an acknowledgement for the change session at least one of bandwidth request message (column 11, lines 15-56; column 13, lines 45-67).

As per claim 13, Chellis and DeLima teach the method of Claim 11, wherein updating the RAN with information further comprises: updating a rate limit associated with a communication queue in the RAN that is used to process traffic associated with the user's session (column 4, lines 40-58; column 10, lines 56-67; column 16, lines 1-26).

As per claim 14, Chellis and DeLima teach the method of Claim 5, further comprising: authenticating at least one of the NSP and the ASP with the RAN prior to sending the query from at least one of the NSP and the ASP to the RAN (column 4, lines 40-59; column 8, lines 63-67).

As per claim 15, Chellis and DeLima teach the method of Claim 14, wherein authenticating at least one of the NSP and the ASP with the RAN comprises: sending an establish service session request message from at least one of the NSP and the ASP to the RAN that contains an identification of at least one of the NSP and the ASP and authorization credentials (column 3, lines 63-67; column 15, lines 56-67); and sending an establish service session response message from the RAN to at least one of the NSP and the ASP that contains an authentication result (column 9, lines 40-67; column 16, lines 1-26).

As per claim 16, Chellis and DeLima teach the method of Claim 5, wherein sending the query comprises: sending a query session at least one of bandwidth request message from at least one of the NSP and the ASP to the RAN that contains a request for at least one of bandwidth information associated with the user's session (column 10, lines 1-42; column 19, lines 8-47); and

sending a query session at least one of bandwidth response message including scheduling resources from the RAN to at least one of the NSP and the ASP that contains the at least one of bandwidth range (column 11, lines 15-56; column 13, lines 45-67).

As per claim 17, Chellis and DeLima teach the method of Claim 1, wherein the request is a first request, the method further comprising:

updating the RAN and the CPE with information to modify the at least one of bandwidth and QoS associated with the user's session (column 4, lines 40-58; column 9, lines 1-15);

then receiving a second request at at least one of the NSP and the ASP to delete or change at least one of bandwidth and QoS associated with the user's session (column 9, lines 16-37); and

using API calls at at least one of the NSP and the ASP to communicate with the RAN to change the at least one of bandwidth and QoS associated with the user's session to a default value in the RAN (column 10, lines 1-42).

As per claim 18, Chellis and DeLima teach the method of Claim 1, wherein the RAN comprises a Broadband Remote Access Server (BRAS) (column 9, lines 1-15).

1. Claims 19-36 and 37-54 are rejected under the same rationale as claims 1-18 because they teach the system and computer program product of the method of claims 1-18.

As per claim 55, Chellis teaches a method of modifying at least one of bandwidth and Quality of Service (QoS) for a user session in a network that comprises a Regional/Access Network (RAN) that facilitates differentiated end-to-end data transport between a Network Service Provider (NSP) and an Application Service Provider (ASP) and a Customer Premises Network (CPN) that includes Customer Premises Equipment (CPE), comprising:

receiving a request at at least one of the NSP and the ASP [resource allocator 30, resource request manager 40] to change at least one of bandwidth and QoS [resource 25]

Art Unit: 2157

associated with the user's [consumer 20; component] session (request for more resources; column 3, line 54-57; column 4, lines 28-40; column 8, lines 36-41; column 9, lines 1-15); and using messaging interface calls [abstract] at at least one of the NSP and the ASP to communicate with the RAN to modify the at least one of bandwidth and QoS associated with the user's session (allocating resources; column 4, lines 28-40; column 8, lines 18-26; column 8, lines 51-60; column 21, lines 16-45).

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to UZMA ALAM whose telephone number is (571)272-3995. The examiner can normally be reached on Mondays and Tuesdays 5:30 - 2.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/756,790
Art Unit: 2157

Page 10

Uzma Alam
UA
May 19, 2008

/Ario Etienne/
Supervisory Patent Examiner, Art Unit 2157